Amendments to the Claims

Please cancel claims 1, 2, and 4 as shown in the following listing of claims. This listing of claims will replace all prior versions, and listings, of claims in the application.

1-4 (Cancelled)

5. (previously presented) An arrangement for assessing the quality of skin print images, and particularly fingerprint images, characterized by a system for calculating

gradients for pixels of a skin print image such that a gradient is calculated for each pixel of the skin print image,

a mean value derived from the gradients of the pixels in each region of the skin print image, and

a measure of quality from similarities in the mean values from region to region,

wherein the system is arranged

to enter the mean values in two directional matrices for x and y,

to form scalar products of the directional matrices having matrices that are displaced horizontally, vertically and in the directions of both diagonals by one region,

to sum, over all the regions of the skin print image, each of the products that are obtained by multiplying the matrices, and

to form the quality measure by adding the sums together and dividing the scalar products of the directional matrices, said scalar products having been summed over all the regions, by themselves,

wherein the quality measure is calculated using the following equation:

$$Q = \frac{(A_x + A_y + A_{xy} + A_{yx})}{4A},$$

where Q is the quality measure and A_x, A_y, A_{xy} and A_{yx} are the scalar products, wherein A_x, A_y, A_{xy}, A_{yx} and A are computed using the following equations:

$$A_x = \sum_{k,l=1}^{max-1} \left\langle \begin{bmatrix} (g_x)_{k,l} \\ (g_y)_{k,l} \end{bmatrix}, \begin{bmatrix} (g_x)_{k+1,l} \\ (g_y)_{k+1,l} \end{bmatrix} \right\rangle,$$

$$A_y = \sum_{k,l=1}^{max-1} \left\langle \begin{bmatrix} (g_x)_{k,l} \\ (g_y)_{k,l} \end{bmatrix}, \begin{bmatrix} (g_x)_{k,l+1} \\ (g_y)_{k,l+1} \end{bmatrix} \right\rangle,$$

$$A_{xy} = \sum_{k,l=1}^{max-1} \left\langle \begin{bmatrix} (g_x)_{k,l} \\ (g_y)_{k,l} \end{bmatrix}, \begin{bmatrix} (g_x)_{k+1,l+1} \\ (g_y)_{k+1,l+1} \end{bmatrix} \right\rangle,$$

$$A_{yx} = \sum_{k,l=1}^{max-1} \left\langle \begin{bmatrix} (g_x)_{k+1,l} \\ (g_y)_{k+1,l} \end{bmatrix}, \begin{bmatrix} (g_x)_{k,l+1} \\ (g_y)_{k,l+1} \end{bmatrix} \right\rangle, \text{ and}$$

$$A = \sum_{k,l=1}^{max} \left\langle \begin{bmatrix} (g_x)_{k,l} \\ (g_y)_{k,l} \end{bmatrix}, \begin{bmatrix} (g_x)_{k,l} \\ (g_y)_{k,l} \end{bmatrix} \right\rangle.$$

6. (Previously Presented) (previously presented) An arrangement as claimed in claim 5, characterized in that the system is arranged to square the initially calculated gradients, which have the components $g_{x(alt)}$ and $g_{y(alt)}$, after the fashion of a complex number by the formulas $g_x = g_{x(alt)}^2 - g_{y(alt)}^2$ and $g_y = 2g_{x(alt)} * g_{y(alt)}$.

7. (cancelled).

8. (previously amended) An arrangement as claimed in claim 5, characterized in that the system is arranged to determine, from the lengths of the averages gradients, a region of interest of the skin print that has been scanned.